

***REMARKS***

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims.

***Status of the Claims***

In the present Reply, claims 1, 9, 10 and 11 have been amended and claims 12-14 have been added. Thus, claims 1-14 are pending in the present application.

No new matter has been added by way of these amendments and new claims because each amendment and new claim is supported by the present specification. For example, the amendments to claim 1, 9, 10 and 11 have support in the present specification at page 12 (see, e.g., lines 19-22) (see also the paragraph bridging pages 11-12). The amendments to claim 10 and 11 are further supported at page 7, lines 1-5 from the bottom of the page. The amendment to claim 10 has further support at page 27, lines 8-10 of the specification. New claims 12-14 drawn to other embodiments of the present invention have been added for the Examiner's consideration. Each of these new claims has support in the present specification in the first paragraph of page 13. Thus, no new matter has been added.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

***Issues Under 35 U.S.C. § 101***

Claims 10 and 11 stand provisionally rejected under 35 U.S.C. § 101 as asserted to be claiming the same invention as claim 1 of co-pending Application No. 10/872,379 (see paragraphs 1-2, page 2 of the Office Action). Since this is a provisional rejection, Applicants respectfully request that the Examiner hold this provisional rejection in abeyance until this or the co-pending application actually issues as a patent.

In addition, Applicants note that the cited co-pending application is directed to using an alkaline earth metal salt, versus the use of a monovalent metal salt in the present invention. Also, there is another patentable distinction given the difference in the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups of the copolymer for each application. Thus, withdrawal of this provisional rejection is respectfully requested.

***Issues of Double Patenting***

Claims 1-9 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Applic. No. 10/872,379 (see paragraph 3, pages 2-3 of the Office Action). This is a provisional rejection. Thus, Applicants respectfully request that the Examiner hold this provisional rejection in abeyance until this or the co-pending application actually issues as a patent. *See* M.P.E.P. § 822.01.

In addition, Applicants note that the cited co-pending application is directed to using an alkaline earth metal salt, versus the use of a monovalent metal salt in the present invention. Also, there is another patentable distinction given the difference in the average mole number of C<sub>2-4</sub>

oxyalkylene groups or oxystyrene groups of the copolymer for each application. In addition, a Rule 132 Declaration is enclosed, which is further proof of the patentability of the presently claimed invention. In the attached Declaration, one of ordinary skill in the art would understand that the instantly claimed degree of neutralization of 50% to 90% leads to unexpected results. In particular, the Table on page 2 of the Declaration shows how the neutralization degree unexpectedly improves the production of powder. Thus, this provisional rejection has been overcome.

Thus, given these patentable distinctions, withdrawal of this provisional rejection is respectfully requested.

***Issues Under 35 U.S.C. § 102(b)***

Claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Isomura *et al.* '027 (U.S. Patent No. 6,437,027) (see paragraphs 4-5, pages 3-5 of the Office Action).

Also, claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by JP '345 (Japanese Publication No. JP409328345A) (see paragraph 6, pages 5-6 of the Office Action).

Further, claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by JP '315 (Japanese Publication No. JP402000086315A) (see paragraph 7, page 6 of the Office Action).

Finally, claims 1-11 (Office Action also refers to claims 13-20) stand rejected under 35 U.S.C. § 102(b) as being anticipated by JP '146 (Japanese Patent No. 2000-26146A) (see paragraph 8, page 7 of the Office Action; the Office Action incorrectly refers to Japanese Patent No. 20026146A).

Applicants respectfully traverse, and reconsideration and withdrawal of these rejections are respectfully requested based on the following.

The Present Invention and Its Features

The present invention (as recited in instantly pending claim 1) is directed to a method of dispersing a hydraulic composition, wherein the method comprises dispersing the hydraulic composition with a powdery dispersant. In the present invention, the powdery dispersant comprises at least one copolymer, wherein the copolymer is (1) a powder. Further in the present invention, (2) at least part of the mentioned copolymer is an alkali metal salt. Also as a part of the present invention, (3) the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups of the copolymer is 50 to 150. Finally, in the present invention, (4) the monomer mole ratio of (a)/[(a) + (b)] × 100 ranges from 15-45 (mole%).

The present invention is also patentably distinct from conventional methods in that the copolymer has a neutralization degree of 50% to 90%.

In another embodiment of the present invention (see claim 12), the copolymer of the present invention can be easily obtained in the form of a powder. The powdered copolymer can also be obtained without using a carrier (see claim 13).

In contrast, none of the cited references discloses all instantly claimed features, including features (1), (2), (3) and (4) mentioned above.

Each Cited Reference Fails to Disclose All Instantly Claimed Features

With respect to the cited Isomura '027 reference, this reference fails to disclose at least features (2), (3) or (4) mentioned above. Instead, Isomura '027 discloses that a polymer powder is obtained with a reducing agent to reduce load of mixing and prevent gelation (see its claim 1 at column 37 and column 6, lines 29-34). However, there is no disclosure of, e.g., the claimed (3) the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups of the copolymer is 50 to 150 or (4) the monomer mole ratio of  $(a)/[(a) + (b)] \times 100$  ranges from 15-45. Instead, Isomura '027 discloses, e.g., Polymer (A), (B), (C) and (D) in Table 1 (column 16), wherein each disclosed Polymer does not match what is presently claimed. Specifically:

- Polymer (A) has an average added mole number of AO of 40;
- Polymer (B) has that average added mole number of AO as 75, but the monomer mole ratio of  $(a)/[(a) + (b)] \times 100$  is 12.5%;
- Polymer (C) has an average added mole number of AO of 14, which is calculated as  $(23 \times 10 + 8 \times 15)/(10 + 15)$ ; and
- Polymer (D) has an averaged added mole number of AO of 47, which is calculated as  $(75 \times 6 + 30 \times 10)/(6 + 10)$ .

Isomura '027 further describes a Table 3 (column 17), wherein the average added mole number of AO is only 40. Further, Table 4 (column 17 also) in Isomura '027 shows an average added mole number of AO as 32, which is calculated as  $(40 \times 16 + 23 \times 15)/(16 + 15)$ .

Thus, there is no disclosure of all claimed features of the present invention. Because "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," the cited Isomura '027

reference cannot be a basis for a rejection under § 102(b). *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Thus, because of the lack of disclosure of all features as instantly claimed, the rejection in view of Isomura '027 is overcome. Reconsideration and withdrawal are respectfully requested.

This rejection in view of Isomura '027 is overcome for another reason. In particular, Isomura '027 does not describe (1) the mentioned copolymer being in the form of a powder. The cited Isomura '027 reference instead shows, at column 6, lines 6-28, that the pH is adjusted to 7-9 with an alkaline earth metal such as calcium hydroxide. However, there is no disclosure in Isomura '027 that a powder can even be (easily) obtained.

This rejection in view of Isomura '027 is overcome because Isomura '027 also does not describe feature (2) of at least part of the mentioned copolymer is an alkali metal salt.

Accordingly, reconsideration and withdrawal of this rejection in view of Isomura '027 are respectfully requested.

With respect to JP '345, this reference merely discloses an alkaline earth metal can be used. There is even no working example that uses the alkaline earth metal. But the present invention is directed to using an alkali metal salt. Thus, this is one distinction from this reference.

Further, no powdered product as instantly claimed is disclosed in JP '345 (feature (1) discussed above). In addition, JP '345 fails to mention any use of a powdery dispersant. Finally, JP '345 does not disclose any neutralization degree for its copolymer, as that which is instantly claimed. Thus, JP '345 also fails to disclose many and all instantly claimed features. Applicants note that "The single reference must describe and enable the claimed invention, including all

claim limitations, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention.” See *Elan Pharmaceuticals Inc. v. Mayo Foundation for Medical Education and Research*, 64 USPQ2d 1292, 1296 (Fed. Cir. 2002) (citing *Crown Operations International, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002).

Accordingly, under *Verdegaal Bros.* and *Elan Pharmaceuticals*, reconsideration and withdrawal of this rejection under § 102(b) over JP ‘345 are respectfully requested.

With respect to JP ‘315, this reference is also deficient in disclosing all presently claimed features. In particular, JP ‘315 merely shows that an alkaline earth metal can be used, but there is no working example thereof. However, the present invention is directed to an alkali metal salt, and thus is patentably distinct from JP ‘315. In addition, there is no disclosure of a powder product or disclosure of a neutralization degree of the copolymer as instantly claimed in the cited JP ‘315 reference. Thus, this rejection over JP ‘315 is also overcome due to the reference’s lack of disclosure of many and all presently claimed features. *Verdegaal Bros.*; *Elan Pharmaceuticals*. Accordingly, reconsideration and withdrawal of this rejection in view of JP ‘315 are respectfully requested.

With respect to JP ‘146, this reference is also deficient in disclosing all presently claimed features. In particular, JP ‘146 merely shows that an alkaline earth metal can be used, but there is no working example thereof. Again, the present invention uses an alkali metal salt and is thus patentably distinct from JP ‘146.

Also, claim 1 of JP ‘146 describes a powdery dispersant as containing polyalkylene glycol or a fatty acid. Further, it is shown at paragraph [0007] that dry powder can be obtained

with the polyalkylene glycol or the fatty acid. However, JP '146 fails to disclose any copolymer having (3) the average mole number of  $C_{2-4}$  oxyalkylene groups or oxystyrene groups of the copolymer as 50 to 150, or a copolymer having (4) the monomer mole ratio of  $(a)/[(a) + (b)] \times 100$  ranges from 15-45, as instantly claimed. Instead, JP '146 discloses a Table 1 wherein the average added mole number of AO is 23. Further, in its Table 2, JP '146 discloses an average added mole number as 75, but  $(a)/[(a) + (b)] \times 100$  equals 12.5%. Also, in its Table 3, JP '146 describes the average added mole number of AO as 14, which is calculated as  $(23 \times 10 + 8 \times 15)/(10 + 15)$ . Also, in Table 4, JP '146 discloses an average added mole number as 47, which is calculated as  $(75 \times 6 + 30 \times 10)/(6 \times 10)$ . Thus, the features of present invention are not met.

JP '146 also fails to disclose any neutralization degree as instantly claimed. This is another failure of the JP '146 reference. Additionally, JP '146 fails disclose anything definite regarding the instantly claimed copolymer and its employment of an alkali metal salt.

Accordingly, JP '146 is significantly deficient in describing many and all instantly claimed features. Therefore, reconsideration and withdrawal of this rejection over JP '146 are respectfully requested.

### ***Conclusion***

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

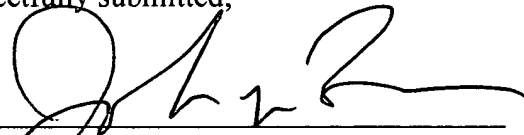


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

  
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Attachment: Declaration under 37 C.F.R. § 1.132